THE

LOUISVILLE MEDICAL NEWS.

"NEC TENUÍ PENNÂ."

SATURDAY, OCTOBER 4, 1884.

Original.

A CASE OF LITHOTOMY WITH ARTIFICIAL OPENING FOR DRAINAGE.*

BY J. G. CARPENTER, M. D.

Mr. William C., aged sixty-eight years, a farmer by occupation, is of good family history, and a man of temperate habits.

About thirteen years ago he developed double inguinal hernia, and in 1873 he had a violent attack of remittent fever, chronic diarrhea with incontinence of feces, and complete atony of bladder with retention of urine resulted as sequels of the fever. Till 1881 Mr. C. averaged fifteen to twenty stools per day, and had to catheterize the bladder once in every seven hours. After this period the stools became more frequent, averaging twenty to forty per day, the bladder grew more irritable and the catheter had to be used every two or four hours. Gastro-duodenal dyspepsia supervened, and the food was not assimilated. Riding on horseback or in a vehicle or walking over rough ground gave him pain in the bladder.

On September 3, 1883, the gentleman consulted me, exhibiting the following symptoms: he was anemic and nervous, had recurrent pain at neck of bladder, vesical tenesmus, epididymitis, pain in thighs and feet, extending along the crural nerves, and coldness alternating with burning of feet. He also complained of pain in lumbar region darting from kidneys to bladder. His bladder has to be catheterized every one or three hours. The bladder was examined for stone, and the presence of a calculus was clearly made out. The patient was told that he had a stone in his bladder and that he would have to submit to an operation, either lithotrity or lithotomy for its removal.

Chemical examination of urine revealed specific gravity 1,020, alkaline reaction, ammoniacal odor, and phosphatic deposit. It was of a red color, and slightly albuminous, microscopic examination revealed blood and mucous corpuscles, bladder epithelium, and an excess of phosphate of lime and triple phosphates. The patient's health was too much impaired at the time for a successful operation.

Special attention was paid to his dyspepsia, diarrhea, anemia and epididymitis, and local treatment was directed to the bladder, it being washed out two or three times daily with warm water, Oj; sodium biborate, ʒ ss to ʒ iv ss. Under these measures the excessive irritability, vesical tenesmus, and epididymitis subsided in about ten days, the blood and excess of mucus at the same time disappearing. The patient was now comparatively comfortable and able to sit up. Acids were given for the phosphatic diathesis, and anodynes were employed to allay pain and induce sleep.

On February 1, 1884, Mr. C. was in a fair condition for the operation, his condition being all that could have been anticipated from treatment. His stools now averaged from three to five a day, his appetite and digestion being comparatively good. He had also gained considerable strength and about thirty pounds of flesh. The desire to urinate was more frequent than at any time before, the catheter being in demand every half, one, or two hours; the urine was still ammoniacal and contained an excess of mucus.

The patient was determined to have the calculus crushed, but by cogent arguments his judgment was overruled and he finally consented to a lithotomy. When his age (sixty-eight), and the small mortality and comparatively little risk of the lithotrity or litho-

*Read before the Central Kentucky Medical Association, July 16, 1884.

plaxy of Bigelow were taken into account, this seemed at first to be the operation best fitted to the case. But on reflection I was satisfied that lithotomy gave more promise of success, since the lithoplaxy seemed to be contra-indicated by the presence of the following conditions, viz., irritable bladder, chronic and permanent retention of urine, concentric hypertrophy, low cystitis, and diminished capacity of bladder. Under these circumstances the lithoplaxy would have necessitated an artificial opening through the perineum for drainage and the securing of complete rest to the inflamed bladder.

The most unfavorable cases for lithotrity are those of atony or irritability of the bladder and asthenic cystitis. In such cases the introduction of the sound or metallic catheter always produces hemorrhage and aggravates the cystitis. In this case, extreme irritability, complete atony, chronic cystitis, concentric hypertrophy with contraction of the bladder existed. The organ would not hold more than three ounces even when the patient was completely anesthetized; and during the two weeks preceding the operation the patient had to be catheterized every half hour or hour. Every feature of the case, except the age, contra-indicated lithotrity, and lithotomy alone seemed to promise relief.

On February 4th the preliminaries of the operation were arranged, and the assistance of Drs. W. B. Penny, Reid, Huffman, Bailey, Bronaugh, and Brayton were secured.

On February 5th, at 9 A. M, the patient was given quinine, grs. x.; morphia sulph., gr. ¼; atropia sulph., gr. $\frac{1}{60}$. At 10 A. M. the patient, being anesthetized, was placed in the lithotomy position, and the bladder injected with warm water, 4 parts, listerine, 1 part, three ounces being its utmost capacity. A search was now made for the stone; it was easily detected, and all were convinced of its presence.

The left lateral operation was performed, and a phosphatic calculus weighing seventy-five grains was extracted; it was soft and friable, and, crushing when seized by the forceps, a portion of the detritus was lost. The bladder was again washed out with the listerine solution as before the operation, a petticoated silver tube being inserted into the bladder. The hemorrhage during operation was very slight.

At 11:30 A. M. patient was put to bed, warmly covered with blankets and dry heat applied to sides and extremities. Consciousness was restored by this time and he talked rationally about the operation. At 4 P. M. the pulse was 100, temperature 102° F., and respirations 24. There were also great thirst and much restlessness. Quinine, grs. v, and morph. sulph., gr. ¼, were administered, the bladder washed out with warm water and listerine and a hot foot and steam bath given under the cover.

9 P. M.: Temperature 100° F., pulse 84, respirations 18 per minute, thirst and restlessness abated.

February 6th, patient had a good night's rest—is refreshed; pulse natural, appetite good. Tonics and restoratives were prescribed with acids for the phosphatic diathesis; the bladder to be washed out with warm water and listerine three times a day. Good native wine or whisky was allowed daily *pro re nata*. At the expiration of seventy-two hours the silver tube was removed and a silver catheter introduced into the artificial opening and retained with tapes. Digestion being impaired, lactopeptine was given.

February 19th: The case has progressed up to this time without an unfavorable symptom, the patient having fully recovered from the effects of the operation. The cystitis has disappeared, the urine is normal in color, quantity, specific gravity and reaction. The artificial opening has not been allowed to heal entirely. A No. 10 catheter may easily pass through it into the bladder. This will be kept patulous for future drainage and micturition. If the opening should close with the existing atony of the bladder present, it would not be long before the retention of urine would rekindle cystitis, or a new calculus would form.

On February 24th the artificial opening and every condition of the patient were favorable. He had gained strength, being able to walk about, had a good appetite, and could void his urine every two or three hours through the new opening.

Considering the feeble constitution, the various complications, the advanced age of patient, the operation was successful beyond reasonable expectation, and of course a great blessing to the patient. No better results in a general way could have been anticipated, while the prompt relief of the cystitis was striking if not remarkable.

Dr. Sims was the first and Dr. Emmet the second surgeon to treat chronic cystitis in the female by means of an artificial opening into the bladder. Dr. Willard Parker was the first surgeon to make an artificial opening into the bladder for chronic cystitis

in the male. On November 23, 1880, this surgeon operated at Bellevue Hospital on a case of chronic cystitis in the male. Of this he says: "The object in view was to open a channel by which the urine could drain away as fast as secreted, and thus afford rest to the bladder, the first essential indication in the treatment of inflammations." This patient died in a few days, the autopsy revealing the fact that the kidneys had undergone degeneration. In 1881 Prof. Parker did alithotomy on a man, and though he was unable to remove the calculus the cystitis was relieved by free drainage through the artificial opening in the perineum. Three months later a new cystitis developed, the kidneys became involved, and death resulted.

Mr. Harrison, of the Liverpool Royal Infirmary, performed lithotomy for chronic cystitis in the male bladder with hypertrophy of the prostate, in order to get free drainage and present relief from retention of urine, and dispense with the use of the catheter. In this case the patient made a good recovery.

What might have been the permanent result of the operation in my case I can not say, for the patient took a severe cold on March 1st, which developed a broncho-pneumonia from which, on the 4th, at 9 A.M., he died, without pain.

It will, however, be seen that this sudden fatal termination in no way detracts from the success of the operation. I have therefore laid before this Society, in detail, the merits of this case; and, since it corroborates the teachings of the great surgeons, Sims, Emmet, Parker, and Harrison, I trust that in similar cases you will be inclined to pursue the same course of treatment, and that your results will confirm my belief that an artificial opening in the bladder is a *sine qua non* in the treatment of like cases of chronic cystitis.

OWING to the appointment of Prof. Schweninger as a member of the Imperial Board of Health, the director, Dr. Struck, has resigned. Dr. Koch has refused to be his successor, and has also withdrawn from the Board. Prof. Schweninger owes his promotion to Bismarck. He is said to have had no scientific or social standing among the profession prior to his success in Bismarck's case. His elevation to a chair in the medical faculty of the Berlin University is a very bitter pill to the profession in Berlin.—*Maryland Medical Journal.*

Miscellany.

AN AUTOGRAPH LETTER OF EDWARD JENNER.—The Birmingham Medical Review publishes the following autograph letter of Edward Jenner on the subject of vaccination, now in the possession of the Birmingham Medical Institute, to which it was recently presented. It is written on the flyleaf of a circular of inquiry and information regarding vaccination, which Jenner circulated among the English physicians at the time when he was developing and testing his great discovery.

BERKLEY, February 9, 1821.

Sir: I am happy to find that you are so actively engaged in physiological pursuits connected with the diseases of animals. It would be pleasing to me to ascertain that you are speaking experimentally on the application of grease, but the *mere matter* of grease has failed repeatedly in my hands; the matter of the vesicles by which the grease is, according to my observation primarily excited, has had, however, the contrary effect. I have now under my own use and in circulation matter which was taken from the finger of a farrier, that never passed through the circulation of a cow. It produces beautiful pustules, although it has been in use nearly three years. When matter becomes deteriorated, it is in consequence of passing through a constitution contaminated by the influence of the herpetic fluid. The enclosed circular will tell you what I mean by this. The same phenomena of what is vulgarly called cow-pox, for equine-pox, have been produced by handling a horse which had the pole-evil. Has it ever been considered that the sub-maxillary glands are otherwise than salivary glands as in the human subject? I shall be happy to hear your further observations on this subject, at present they are at issue. That sheep in a meadow which have foot-rot will have a particular something which shall communicate it to another flock, and even to other animals put in the same pasture, I have often observed; but how does it happen that a hunter in a stable badly groomed gets edematous legs and grease also? Now I would ask whether this last disease, *called* grease, and thus generated, as superficially supposed, does not differ from the infectious disease? I had long wished to make experiments whether my notions are correct, but from want of due assistance, I have never been able to accomplish my investigations in this and many other things. I have known cow-pox on the teat of a ewe, but that instance excepted, I have never remarked any other source, except from the horse to the cow, or primarily from one infected cow to another secondarily. I should doubt there is a fallacy about the swallowing experiments, for smallpox virus has been given fifty times with bread without effect. When I have the pleasure of seeing you we will go further into this subject. With the cows I can speak without hesitation that the pock can only be produced by absolute contact. Have you gone into the origin of the two common diseases, red-water in the cow, and string-halt in horses. These I have taken great pains to inves-

tigate, and I am happy to say with success. I am sorry to say that in many instances I have traced the latter to an incurable origin. I do not wish these crude observations to appear in print. I hope you will be able to fulfill your visit to this neighborhood, as I shall be glad to have an interview with you. Excuse my troubling you with more questions, but have you made any satisfactory researches into the origin of farcy?

I remain, Sir,
Your obedient humble servant,
EDW. JENNER.

Addressed: For JAS. WHITE, Esq., Vety. Surgeon, 199, Vineyards, Bath.

STILL RAGING.—A dispatch from Rome, dated September 29th, states that the "report of cholera in Italy for the past twenty-four hours gives a total of 355 fresh cases, and 212 deaths, including 171 cases and 100 deaths at Naples, and 95 cases and 55 deaths at Genoa.

"Eleven deaths from cholera occurred in the southern provinces of France, including the Vicar General of Nimes.

"Four cholera patients are still under treatment at Bon Rencontre Hospital, Toulon, and one at St. Mandrier, where there was one death to-day.

"Six French passengers from Cochin China, on the steamer Abdel Kadir, which put in at Algiers for quarantine, died of cholera after having been landed and placed in the hospital. Five deaths from cholera occurred at Marseilles to-day."

ROBERT BARNES, writing from London to the American Journal of Obstetrics of some of the peculiarities in the professional relations of that metropolis, speaks of the contempt in which the practitioners of midwifery have been held by pyhsicians and surgeons, and tells of a neat repartee once made thereupon by Robert Lee. At a full meeting of the Medical and Chirurgical Society the late Mr. Skey, bursting with an exultant sense of his surgical dignity, exclaimed, "Thank God, I know nothing of midwifery!" The rejoinder was prompt and crushing. "If," said the veteran obstetrician, "the gentleman who has just spoken is thankful for his ignorance, he has much to be thankful for."—*Boston Med. and Surg. Jr.*

THE EXPLORING NEEDLE FOLLY. — The tubular needle furnished with all hypodermic syringes is a far better instrument for exploration than the grooved needle called an exploring needle, and has the additional advantage that it can be used with the syringe attached, which, when so employed, becomes a small aspirating pump. The exploring needle should be discarded from all pocket cases, and substituted by the hypodermic syringe, which is needed also for subcutaneous medication. — *Phila. Polyclinic.*

OCCULT PHILOSOPHY—The New York Medical Journal gives the following extract from a communication recently received. The author, who is proved to be a doctor by his way of abbreviating *post-mortem*, is not the first medical man who has met with snakes in most unwonted places when moved by the spirit to attempt scientific work:

"When I state that after the death of a dog or person who has been bitten with a poison snake, on examination P. M. there will be found attached to the liver a snake of the same species of the one that bit the dog or person, and if the dog has been bitten twice, there will be two snakes, and in one instance the snake put out its tongue, nobody who has never seen it or heard of it will believe it. Yet such is the fact.

"This is why a person or dog who has been bitten with a snake, feels the influence every year at the time snakes awake up from their dormant state."

AN EXHIBITION OF INFANTS is to be held in Paris on the 30th of October next, and during as many days after as may be necessary. The infants are to be divided into four classes: First, from one year to eighteen months old; second, from eighteen months to two years; third, from two years to thirty months; fourth, from thirty months to three years. The jury will be composed of medical men and artists. The children who win the prizes will not be those of the fattest, but those of the best physical conformation as regards development of bone and muscle. There have been already upward of two thousand applications.

KNOCKING AT THE DOOR.—At a recent meeting of the Medical Society of the County of New York (September 22d) the applications for membership of "two gentlemen who had been homeopathists, and who had been graduated at homeopathic schools" were considered. No final action was taken, but the names were referred back to the *Comitia Minora*.

AMERICAN GYNECOLOGICAL SOCIETY.—The ninth annual session of this Society was held at the Palmer House, Chicago, on Tuesday, Wednesday, and Thursday, Sept. 30th, and Oct. 1st and 2d. As usual an attractive programme was presented, and valuable proceedings may be looked for.

SUCCESSFUL TREATMENT OF SNAKE-BITE BY THE EXPLOSIVE CAUTERY.—The recent reports of fatal cases of snake-bite induce me to invite attention to a method adopted and found successful in the case of a soldier of Troop I, Fourth Cavalry, at Camp Supply, Indian Territory, in the fall of 1878.

The patient was struck upon the dorsum of third phalanx of the forefinger while engaged in gathering wild grapes.

He reached me very soon after the occurrence, probably not more than ten minutes. The surface about the fang puncture was slightly moistened, and as much gunpowder as could be retained placed on it. The powder was then ignited, the wound scarified, and powder again ignited upon it; then a light linseed poultice sprinkled with tinct. opii completed the dressing. Brandy was administered freely, and the patient soon fell asleep. The finger and hand were considerably swollen and discolored. There was a slight nausea and depression, all of which soon passed off, and the man recovered.

I had learned of a case occurring among the Indians a short time before this, which was successfully treated by the explosive cautery, followed by a poultice of the chewed root of a species of chenopodium. No stimulants. In this case, that of a young squaw, the wound was on the leg.

This cautery is rapid, painless, and thorough, and if quickly applied appears to afford the best chances for recovery.—*T. G. Wilcox, U. S. A., Washington Barracks, D. C., in the Boston Med. and Surg. Journal.*

CHOLERA.—The number of deaths caused by the cholera in Europe from the first outbreak in Toulon up to September 25th, is 14,132. There were 7,974 deaths in Italy; 5,798 in France, and 360 in Spain. In Naples alone the deaths to that date amounted to 5,923; in Marseilles, 1,733; in Toulon, 982, and in Arles, 383.

Two remarkable cases of blood-poisoning in Suffolk have been reported. In one of them the morbid process seems to have been induced by a slight wound of the arm resulting from a fall on stubble; in the other case a farm laborer cut his finger with a wheat straw, the arm became greatly swollen, and the man died.—*Lancet.*

NEW YORK has recently been honored with the presence of Dr. Playfair and Mr. Lawson Tait.

ARM-TO-ARM vaccination is far more protective than the use of stored lymph, whether it be human or animal. The reason for this statement is that vaccination with stored lymph "takes" with much less certainty, and often produces much smaller vesicles than vaccination done directly from arm to arm.—*Lancet.*

DR. MELVILL TAYLOR, a promineut physician of Govanstown, Md., died on the 16th inst., with diphtheria contracted while in the discharge of his professional duties. Dr. Taylor was thirty-four years of age, and stood very high in the community in which he resided.

SUICIDE.—A student of the Medical Department of the University of New York recently committed suicide while riding in a cab. He had been for some time in a state of deep depression in consequence of the hopeless illness of his mother and sister.

CHEMICAL EUPHEMISM. — FEW people are aware, or seriously consider when they take a cup of tea, that it is essentially an aqueous solution of trimethylxanthine ($C_8H_{10}N_4O_2$) which they are drinking.—*New York Medical Record.*

DR. JOHN W. MALLETT, Professor of Chemistry in the University of Virginia, has been elected to succeed Dr. Robert E. Rogers as Professor of Medical Chemistry and Toxicology in Jefferson Medical College.

THE New Orleans Medical and Surgical Journal is now edited and published by an association of physicians, under the name of "The New Orleans Medical Publishing Association."

PROFESSOR MALLET has tendered his resignation of the chair of Chemistry in the University of Virginia, and it has been accepted by the Board of Visitors.

DRS. A. JACOBI and N. S. Davis were appointed at Copenhagen as the American representatives on the International Collective Investigation of Disease Committee.

EIGHT deaths from yellow fever occurred in Havana last week.

CHICAGO is to have a new hospital for women and children.

The Louisville Medical News.

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H. A. COTTELL, M. D., - - - - - - - Editor.

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A THERAPEUTIC NOTE.

The recent experiments of Curci, reported in the *Revue de Therap. Medico-Chir.*, No. 16, 1884, in which, by putting the cranial cavity of dogs in communication with a manometer, he was able to note the effects of various drugs upon the cerebral circulation, are interesting in that they demonstrate certain effects which have been attributed to these drugs upon more or less doubtful symptomatic or post-mortem evidence.

This observer found that opium and morphia cause well-marked hyperemia of the brain, while the reverse takes place after the administration of chloral, ether, paraldehyde, and quinine. He therefore suggests that sleeplessness be treated by chloral in plethoric, and by opium in anemic patients.

In a former number of the NEWS a note embodying the substance of the above was laid before our readers. The subject is again referred to because it seems to throw light upon the conditions which give rise to the sometimes very troublesome headache that follows in the wake of a severe intermittent or remittent fever, and to suggest rational measures of treatment. Of course the headache which is so commonly present during the hot stage of a malarial fever is too well understood to require comment; but that headache which not infrequently begins during the stage of defervescence, and persists in spite of the usually employed remedies, though believed to be attendant upon a state of cerebral anemia, and sometimes called "quinine headache," has always been enveloped in more or less etiological obscurity.

In the light of Curci's observations the large amount of quinine given to break the fever now seems to be clearly responsible for the headache, and while the giving of opium would be certainly a rational treatment, it will be found that a large dose of some diffusible stimulant, such as ammonia valerianate, whisky, or brandy, will usually give a more prompt and permanent relief.

INSANITY AMONG RAILROAD ENGINEERS.

The British Medical Journal of September 20th presents a communication from Dr. E. G. Wake relative to the effect of "Engine-driver's Life upon the Mind," stating that during the last two years he has had his attention called to six cases of mental wreck among this class of men in his own immediate neighborhood. The cause seems to be due to "over-anxiety as to the issue of their journeys, extended over too many years of duty." Besides this, much is insisted upon the strain necessary to observe and record what may be called "accidents" of the way, usual or unusual, in accordance with the company's regulations.

The writer suggests that to a man of educated descent these requirements would be easy enough, but to a man whose ancestors have for years been without intellectual culture such details would doubtless be a heavy task. "Thus, the penalty for employing coarse brain-tissue in superior work is a breaking down of the whole machine."

These observations are interesting, ingenious, and high-toned; and if it were not for its remarkable lack in high-sounding

technical terms the communication might be considered as in every way worthy of a thoroughbred alienist.

Statistical data upon this point are, we believe, not yet before the profession; but that men who are overweighted with the grave responsibility of many lives and much property, who break into the rhythm of existence by running their trains either at night or by day, as their employers may elect, for any trip, who must maintain during working hours a ceaseless vigilance, and who have ever before them the solemn probability of a sudden, violent death, should as a class be especially liable to insanity, would not be remarkable. It has, moreover, been observed that not a few of the best and boldest engineers grow so timid when they advance to near old age that they are compelled to abandon their calling. This, we suppose, would be called a *thanaphobia* by the learned psychiatrists, and a peculiar proneness of engine-drivers to insanity, so far as monomania goes, would at least be proved.

The second proposition is more aristocratic than scientific, and will doubtless, under the test of fact, be thrown out as no factor in the problem.

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THE BRAIN AND PHOSPHORIC ACID.—The peculiar associations thought to exist between mental action and the use of phosphorus have been a favorite theme with many physiological chemists. Recently M. Charcot communicated a work by M. Mairet to the Academie des Sciences. The latter gentleman believes the phosphoric acid is intimately associated with the nutrition and action of the brain. In working, the cerebrum is said to absorb sodic and potassic phosphates, and to give out phosphoric acid combined with an earthly base. Intellectual work is believed to retard the general nutrition. Mental exercise modifies the elimination of phosphoric acid by the urine; it diminishes the proportion of acid in combination with alkalies, and increases the earthy phosphates.—*Lancet.*

Dr. S. K. JACKSON, of Norfolk, Va., has been elected President of the Medical Society of Virginia for the ensuing year.

Selections.

TYPHO-MALARIAL FEVER. — The name typho-malarial fever was first suggested by Dr. J. J. Woodward, of the U.S. Army, recently deceased, to describe a group of cases, observed during the late war among the soldiers of the Army of the Potomac, in which the morbid complexus of typhoid fever was modified by a malarial complication. The name was subsequently adopted by a board of medical officers convened in Washington in the summer of 1862, to propose a system of reports for the preparation of the Medical History of the War of the Rebellion, and was made official. The term originally designed for convenience came to be regarded as the exponent of a pathological condition. From that day to the present time a malady compounded of the typhoid and malarial disease has been recognized and treated by the majority of medical practitioners. The new disease has been described as having a composite character, or as a "new hybrid"—a cross between typhoid and malarial fever. This disease was believed by many to be a special type of fever, whilst other observers held that the morbid anatomy of typhoid remained always the same, and was not modified as claimed. Dr. Roberts Bartholow was the first writer to oppose the claim advanced by Dr. Woodward in favor of the specific character of the typho-malarial disease. In a recent article (Medical News, Sept. 13, 1884), Dr. Bartholow reviews the position maintained by him as early as 1867, in which he claimed that Dr. Woodward was in error in supposing that the morbid anatomy of typhoid fever presented any peculiar features in consequence of a malarial complication.

Dr. Bartholow maintained that typhoid is the fever of old, of cultivated countries and dense populations; malarial of new countries and sparse populations; that as populations increase, typhoid supplants malarial fevers, and during the transition period the mixed fever prevails. Dr. Woodward ten years later retracted the opinion he had at one time expressed, and admitted that there is really nothing in the lesions of Peyer's glands in these cases to distinguish them from ordinary cases of typhoid fever. Since the view formerly held by Dr. Woodward still prevails in many sections of this country, Dr. Bartholow undertakes to indicate the real relation of the two elements composing the mixed fever. The term typho-malarial he considers an unfortunate designation, since it implies the existence of a malarial fever into which typhoid enters as an essential element. The typhoid germ received into an organism infected by the malarial poison undergoes development in accordance with its own laws, and is in no respect modified by malarial poisoning. For this reason the term is considered a misnomer, which should be abolished from our nosology. Dr. Bartholow doubts the existence of a typhoid fever whose symptoms are modified by a malarial fever. There are, he thinks, reasons rather for believing that an antagonism exists between the two, so far, that in the presence of the typhoid poison the malarial ceases to be active. There is, in his opinion, a source of erroneous observation in regard to the manner in which a malarial infection may modify typhoid fever, which is in an especial degree responsible for the prevailing misconception. The remittent character of typhoid has been a cause of this error.

The practitioner having the notion of a continued fever in his mind overlooks the fact that at the beginning, and also during the last week of typhoid fever, remissions and exacerbations of temperature occur in every case. Typhoid fever is, he says, properly speaking, a remittent fever. "The likeness to the malarial remittent is all the greater, since in every fully developed case of typhoid sweating is a pronounced symptom. The differentiation is the more difficult during the first week, since in some cases of typhoid there is constipation, and in some cases of remittent diarrhea. In the former gurgling in the right iliac fossa may be wanting; in the latter it may be present."

A further reason for believing in the independence of typhoid is the failure of heroic doses of quinine to cut short typho-malarial fever. It is true, he says, "a massive dose effects a reduction of temperature, and in so far as lessened body heat mitigates the severity of the fever quinine exerts a beneficial action, but that it can not arrest the disease or shorten its duration is absolutely certain."

Dr. Bartholow points out how an error of diagnosis often confuses the judgment of the practitioner. Typhoid may in many cases bear a superficial resemblance to remittent fever. The converse is also true, and the more intense the malarial poison the more nearly the resulting fever approaches

the continued type. In other words a remittent fever may assume the typhoid state. It has long been known that the severe forms of malarial fever tend to assume a lower typhoid state, unless energetically handled by heroic doses of quinine.

Dr. Bartholow is in doubt as to the nature of the influence exerted by the malarial poison on typhoid fever. It appears probable that when the typhoid germ begins its development in the body, the phenomena caused by malarial infection, if it exist, subside. If the malarial poison remains in abeyance during the predominance of the typhoid action, there comes a time when it asserts itself. The intermittent may thus greatly prolong the convalescence if not recognized and effectively treated. In Dr. Bartholow's experience this intermittent succeeds to the typhoid in all cases, in which a really active condition of the malarial poison exists. "In the absence of such manifestations we may well doubt that a malarial complication enters into the morbid complexus." In this way Dr. Bartholow disposes of the question: "Is typho-malarial fever a special type of fevers?" with the unhesitating answer, "It is not."—*Maryland Medical Journal.*

ETIOLOGY AND PREVENTION OF TUBERCULOSIS.—The disease is not strictly contagious, like the exanthems, but requires a special soil—a previous weakening of the constitution. Leaming, as readers of the Journal know, thinks that spores are, perhaps, laid in tubercular cavities, where they develop and fly away to plant spores in similar soil. He maintains that most cases of the disease commence as fibroid, with plastic exudation, in which the bacillus is not a factor. This latter may be true, but more investigations must be made into the condition of lung tissues in this very initial stage of phthisis, much section cutting and staining be done, before any such claim can be more than an assertion. A method of some value might be a daily searching examination of the sputa of persons affected with initial phthisis. If many examinations, competently made, show that the advent of the bacillus is coincident with ascertained softening, a point may be made against the primary agency of the bacillus. Those who would deny the claims of Koch and his followers must support their denials by work as good and conclusive as Koch's original proof. Lungs assuredly in this first fibroid condition will be obtained with difficulty if we rule out, as we ought, the lungs of animals inoculated with the bacillus.

Most men need not fear the disease. Williams says the direct conveyance of tuberculosis from one man to another by contagion is rare. Proof of this is abundant in the rarity with which nurses contract the disease. A wife contracts the disease from her consumptive husband because she has made herself susceptible by her unselfish and unthinking disregard of the laws of health.

If the disease demands a special condition of tissues, it is scientific and proper treatment to prevent its development by so fortifying the tissues as to give them immunity against the attacks of the one known causative agent. Prevent the acquirement of the diathesis, change the diathesis when acquired, sums up preventive treatment. Make the wives, relatives, and nurses of the consumptive the real patients; keep up their resistant powers, and they will not develop tuberculosis. The disease, once acquired, is generally beyond our control, but to prevent its development is feasible.

Like the East Indian who strives to secure the favor of the gods of all creeds, let us bow to the bacillus and destroy the sputa, ventilate and cleanse the apartment used by the sick. Only good to well and sick can result. Exceptionally, it might be well for one thrown into intimate sleeping association with a consumptive in a room poorly ventilated to wear an inhaler.

The experience of generations may have shown that only one seventh of us acquire tuberculosis, but "only one seventh of us" is a large number. Such mortality justifies all proper precautions against the bacillus.

This anti-germ preventive treatment is so enticing in its simplicity of statement and promised thoroughness that one finds it difficult not to follow it, unquestioning, wherever it may lead. Here is the cause. Kill the cause and destroy the disease. But who can contend against the myriad spores incorporated in earth and air through ages of the existence of phthisis? Koch says: "It is probable that the bacillus clinging to particles of dust is breathed into our lungs at every inspiration." We stir them up as we walk the streets; they are in our lungs; nay, more, mounted on the white-blood corpuscles, the bacillus navigates and circumnavigates the shores of the arterial ocean watching for a favorable spot to disembark and settle.

Perhaps its home is not alone the animal

tissues. Koch has proved that the anthrax bacillus has a vegetable habitat. May not the same be true of the *bacillus tuberculosis?* We may kill the developed bacillus, but the spore is probably well-nigh indestructible, like its kindred.—*Dr. A. Bradford Farnum, in New York Medical Journal.*

INFANT DIGESTION.—Dr. H. R. Bigelow contributes to the July number of the Archives of Pediatrics an interesting article on this subject, from which the following extracts are taken: The alimentary tract of the infant is exceedingly susceptible, so that nursing women have to be very careful in their diet. Now if this tract is so impressionable as to feel any departure from a standard diet in the mother, how much more seriously will it suffer in the administration directly of unwholesome cow's milk—not unwholesome, perhaps, in the light of general use, but unwholesome for the limited infantile digestion. It may have an *acid* reaction, or it may come from a cow in *heat*, or it may be tainted with certain vegetable substances obnoxious to the child. The natural food of the baby is its mother's milk.

An intelligent study of human milk will lead up to a more just comprehension of the demands of infant digestion, and to a more perfect knowledge of a physician's duty in prescribing for such cases as are, unfortunately, deprived of the mother's breast. It is to be noticed first, that woman's milk has an *alkaline* reaction, which persists for an indefinite period, and a specific gravity of about 1.0317. It contains water largely in excess (89.20 in 100 parts), milk-sugar, nitrogenous matter, fat, and salines. The albuminoids will vary in different women so largely that we can not affirm that any analysis is infallible. A fair average percentage would probably be about 4.84. The milk-sugar (6.997) is much greater than in cow's milk (4.92). These figures are only approximately correct. No two samples yield the same results. This variability in the composition of woman's milk, if not pathological, is a wise dispensation of nature to provide for the exigencies of each month of advancing age. Thus the function of the milk-sugar as a heat-producer is kept constantly in mind, while the absolute rate of nutrition may vary within wide limits, because the bodily heat must be preserved at all hazard. In fat, woman's milk exceeds that of the cow, but falls far below it in albuminoids. The ash, or mineral constituent of milk, is chiefly concerned in metamorphosis. The basic phosphate of soda is invariably found in the blood, while the acid phosphate of potash is the chief constituent of the juice of the flesh. Phosphate of lime is intimately incorporated with the nitrogenous constituent principles. It is very generally admitted that the carbo-hydrates lead on to fat-production, through the co-operation of the nitrogenous and saline elements. Nitrogenous elements themselves, when in excess, may also serve as a source of fat. Nitrogenous matters do not, probably, undergo complete oxidation within the body; a portion of them is eliminated as urea. Fatty compounds are of higher value as force-producers, because they contain a quantity of hydrogen as well as of carbon free for oxidation. Pavy says that the value of nitrogenous compounds as force-producers depends upon the amount of unoxidized oxidizable elementary matter they contain. In human milk the percentage of nitrogenous matter to carbo-hydrates is about 1.45. About one fourth part of its casein is coagulable by acid. The *alkaline reaction* is *highly valuable*, since it serves to convert the *casein* into *soluble albuminoids* and soluble carbo-hydrates, which are great heat-producers.

"The adult draws his forces from the combustion of non-nitrogenous substances, the albuminoids scarcely serving for this purpose. On the other hand, when the organism is in course of development, the nitrogenous substances are indispensable to the growth of the different tissues. It is therefore easy to see how mistaken is the common practice of condemning children to a diet containing a large quantity of starch and scarcely any nitrogen." (Küss.)

Woman's milk contains no *starch*. It may be conceded that, in the adult, the ptyaline may continue its action in the stomach; that particles of unconverted starch may be transformed by the pancreatic and intestinal juices. In the infant this rule can not apply. The baby does not secrete ptyaline until the sixth or eighth month, *neither do the other juices of pancreas and intestine have any transforming power whatever before that period.* It is sheer ignorance to assert that small particles of starch can do no harm, since they undergo transformation in the intestine, when the truth is that they not only act as irritants, but pass out of the bowels unchanged. The attenuant of woman's milk is an important factor, of which we have little absolute knowledge. It is chiefly in consideration of this

point, that *cow's milk can not ever be safely substituted for that of the mother.* Before it can satisfactorily approximate to this great food of nature, it must be radically transformed by some chemical process, which science has not yet developed. The addition of water to cow's milk will reduce the percentage of albuminoids into harmonious relationship with human milk, but it does not suffice to change the characteristics of the clot. To use starch as an attenuant is, of course, radically wrong.

In view of these facts, it becomes a matter of the utmost interest to establish some definite principles of treatment, in cases where the mother is unable for any reason to nourish her child properly and sufficiently. There is no known process, chemical or mechanical, by which cow's milk alone can subserve this purpose. Up to six months of age, at least, the baby needs just those equivalents found within the mother's breasts—nothing more and nothing less. The compound must be *alkaline* in reaction; it must contain no *cane-sugar* (because cane-sugar must be first converted into grape-sugar before it can be assimilated; cane-sugar is frequently subjected to a kind of acetous fermentation, producing excess of acids in the infant stomach, so that bodily heat will diminish and disorders of respiration and circulation will follow), and no *starch*. It must be rich in heat-producers, although, as I have said before, the amount of albuminoids may vary greatly. Position has something to do with digestion. In some bad case it will be found that, if the infant be placed in the usual position of a nursing child in its mother's arms, that it will assimilate its food, when artificially fed, much more readily. In the nursing child, a by no means inconsiderable amount of heat is derived from the mother's body. An artificially-fed infant is deprived of this, so that there should be some compensatory action in its food. There have been attempts made to overcome this difficulty, and our journals have been full of discussions upon the matter. It may be said that no artificially-prepared food that does not meet all these requirements will be of permanent value in infantile therapeutics. What is needed is something rich in carbohydrates, with a proper admixture of albuminoids, salts and moisture, free from starch and sugar, and alkaline in reation. As instances of the value of Mellin's food in meeting the emergency, the author cites the following cases:

CASE I. K. S., colored, five months old, apparently dying of marasmus; vomits frequently; diarrhea, with inability to retain nourishment. Was nursed by mother until two months old; then was fed by bottle on diluted cow's milk. Ordered appropriate remedies, with formula of infant food as advised by Meigs, in very small quantities. On second day the child was no better. Gave small doses of brandy, burned with sugar; spice poultice to abdomen. Child continues to fail; entire inability to retain nourishment. At the suggestion of a professional friend, I bought a bottle of Mellin's food and subjected it to a very careful analysis. It seemed to be a close imitation of mother's milk—so that I commenced using it at once. The change was immediate and permanent. The effect was due to the principle in the food which acted upon the curd and albuminoids, and brought the cow's milk into a harmonious relationship with human milk. The whole system of the child was poisoned by unwholesome food, which it could not digest, and which was irritating the whole alimentary tract. It wanted heat, and it wanted nitrogenous food.

CASE II. The particulars of this case were furnished me by a friend. A physician was called to see a case where the child had convulsions after each feeding. He questioned the mother in regard to the milk used. She persisted that it was one cow's milk from a fine Jersey on her own farm, and was quite unwilling to make any change. She was finally persuaded to try the milk from another source, and use it with Mellin's food. The child began to improve at once.

CASE III. Entero-colitis. H. D., the infant son of well-to-do parents, in the summer of 1882 had been allowed from time to time small quantities of starchy food in his milk. One night he became restless and irritable, slept but little, and when sleeping moaned frequently. Rejected his food. These symptoms continued for a day or two, when diarrhea set in. With the the increase of inflammation the discharges became more frequent, consisting of small portions of feculent matter, undigested starch, casein, mucus, etc. The abdomen was tender to the touch, and somewhat swelled. Vomiting was troublesome; pulse 148. Ordered warm baths, poultices to abdomen, with one dose of spiced syrup of rhubarb and paregoric. Then gave a simple refrigerant mixture, with gradually increasing quanti-

ties of Mellin's food. As the child grew better its abdomen was enveloped in flannel, and it was kept in the open air for as long a time as circumstances would permit. It thrived upon this artificial food, and soon was perfectly well.

BOROGLYCERIDE IN DISEASES OF THE MIDDLE EAR.—Dr. D. W. Greene, in Columbus Medical Journal, writes: Boroglyceride, fifty to seventy-five per cent solution, achieves many a triumph in the cure of acute and chronic discharges from the middle ear. My experience with it, though comparatively limited, has been on the whole so satisfactory that I now use it almost exclusively in those cases where formerly boracic acid alone or in combination with iodoform, calendula, resorcin, etc., would have been depended on. It is entirely free from the great objection to boracic acid, which is its tendency to cake in the depths of the middle ear unless the discharge be sufficient to moisten it. Boroglyceride, on the other hand, is very hygroscopic, and its affinity for moisture so great that it abstracts water from the tissues of the ear. This property, together with its astringent quality, makes it an agent of very great utility for the relief of a condition in which chronic hyperemia and inflammatory edema are prominent features

The following will serve to show the manner of its application and its curative properties: With a cotton-wrapped probe all discharge was removed from the meatus, and in cases of extensive perforation of the drum from the cavity of the middle ear. If the perforation was small, Politzer's method or the eustachian catheter served to force secretion from the tympanic orifice of the tube and from the depths of the middle ear into external canal, from which it could be readily removed. The patient having been instructed to incline the head to the side opposite the affected ear, ten to fifteen drops of the remedy were instilled into the meatus and came in contact with the diseased surface; even in several cases where the perforation was small, by having the patient perform the act of swallowing, the remedy passed through into the cavity of tympanum, and thence through the eustachian tube in quantity sufficient to be tasted. If this experiment fail, it can be instilled directly into cavity of middle ear, through a small perforation, by means of a pipette.

The discharge soon loses its thick, creamy character and becomes more serous. The odor quickly improves. Nothing, so far as my observation goes, will so quickly and effectually correct the fetor of the discharge as fifty to seventy-five per cent solution of boroglyceride. The congestion and inflammatory thickenings soon begin to subside and a change for the better is soon observed. If polypi be found in the depths of middle ear when the discharge has been cleared away, if large and well organized, they should be removed with the snare. But if only the so-called polypoid condition be present, a very effective mode of treatment is that recommended by Dr. Brandeis, with equal parts of boroglyceride and absolute alcohol. Boroglyceride may be combined with vaseline in any per cent solution, and for use in warm weather may be stiffened with powdered starch, lycopodium, or any indifferent powder. This forms a perfectly stable ointment, which can be made to subserve many important uses in practice.

TYPICAL CASE OF CHOLERA. — Louis Lewis, M.D., M. R. C. S., England, cites the following symptoms as typical of a case of genuine Asiatic cholera:

Premonitory Symptoms: The prostration of strength; sinking of and dark areolæ round eyes; fall of body temperature; sinking sensation about epigastrium; weak respiration; intense thirst; vomiting of watery fluid; copious painless diarrhea; sugar is often present in the urine, and also a peculiar substance thought to be a bile pigment. Casts of tubes, renal and bladder epithelium are also often seen.

Stage of Collapse: Suspended secretions, including total suppression of urine; spasms of muscles of abdomen and extremities, cold sweats; whispering low voice; cold tongue and breath; pulse not to be felt; frequent vomiting and copious rice water purging; surface of body cold and dark colored from venous congestion; coma, and death.

The temperature of the body rises after death. If death does not occur during the state of collapse, the ordinary symptoms of secondary fever ensue with tendency to cerebral complications. Albumen is present in the urine for about four days after the secretions are re-established.

In some cases of cholera there is no purging, but these cases are rapidly fatal.

Green, paint-like vomiting is a highly dangerous symptom and often happens in robust intemperate subjects.

Cerebral symptoms are indicated by suffused eyes, the patient dying in low delirium.—*Medical World.*

TYPHOID FEVER.—Dr. S. K. Jackson, of Norfolk, Virginia, in a paper read before the American Medical Association, lays down the following law for the destruction of germs in disease, which, if true, is of very great importance to the profession:

"No organism can live in its own excreta, in the products of its own vital processes. When carbonic-acid gas is the excretory product, carbonic acid will destroy the life that produced it. If alcohol be the result of the life process, what better agent have we for arresting that process than alcohol itself?

"If sulphureted hydrogen be the exhaled secretion, all acknowledge the efficacy of sulphur and its compounds to arrest the decomposition giving rise to it. So also if ammonia be the result of the vital process of an organism, then by this law we have the right to infer ammonia to be the proper and efficient germicide."

Typhoid fever he claims to be the product of a microzone which is a consumer of nitrogen, as is shown by the ammoniacal exhalations emitted by a typhoid-fever patient from the breath, skin, and urine, these exhalations being due to the decomposition of nitrogenous constituents caused by this micro-organism. In accordance with his law formulated above, he treats the case by the free administration of ammonia, even to the saturation of the system. In the high febrile condition of the early stages of the disease he gives the nitrate of ammonia in ten or twelve grain doses, claiming that it will reduce the temperature to 102° Fahr., and keep it there during the whole course of the disease. As the disease progresses, especially if diarrhea supervene, he substitutes the acetate for the nitrate, giving at the same time acetate of lead and opium. Should nervous symptoms show themselves, tongue become coated, teeth dry and covered with sordes, he resorts to carbonate of ammonia in combination with potassa chlorate. Should coma occur, he uses "hydro-chlorate of ammonia, which he has never known to fail in bringing a case out of that condition." He says, "I have known them to be brought out of it when apparently in articulo mortis, when all treatment had been stopped and the case relinquished."

With this treatment he claims a success which is certainly phenomenal. In one epidemic, out of two hundred and twenty-two cases treated in this manner, not one died.

In conclusion, he says: "My experience with this fever, when treated by the plan here pointed out, enables me to expect that if a case be recognized as one of enteric fever within three days of its inception, it may break at the end of the first septenary. If it be not recognized as such until the fourth or fifth, it can not yield before, but may at the end of the second septenary. (Fourteenth day.) If the treatment has not been commenced before the beginning of the second septenary, the fever can not break before the end of the third (twenty-first day); that it will yield on that day, if it has not yielded before, is almost an absolute certainty."—*The Medical Index.*

A NEW SYMPTOM OF TUBERCULAR MENINGITIS.—Dr. Lambert Ott has recently signalized, as a symptom of tubercular meningitis, the extreme sensibility complained of by the patient when pressure is made over the surface of the femur; a fact which, although accidentally discovered in examining a case, he has been able to verify in a second case where pressure over other parts of the body excited no pain whatever.

The mention of this clinical sign, which the *Paris Medicale* extracts from the Philadelphia Medical Times, brings to our recollection a clinical lecture of Monsieur Lasegue, in which the Professor insisted upon its diagnostic value, and cited three cases remarkably confirmatory of his conclusion. In a first case—called to see a young girl presenting symptoms of meningitis, which, moreover, was confirmed later—Monsieur Lasegue discovered, while exploring the cutaneous surface, an extreme sensibility over the region of the thigh. At the moment he used even a moderate degree of pressure the patient uttered a cry of pain, while no hyperesthesia was present in any other region of the body.

In another patient the pain was not so severe, still it was present in no inconsiderable degree. Finally, in a female twenty years of age, attacked with fever, violent headache, and delirium, this sign was quite pronounced, as the patient was aroused from a semi-comatose condition and became conscious of severe suffering as soon as pressure was made on the thighs.

Monsieur Lasegue was forcibly reminded of these several cases occuring in his practice, apropos to the condition of a young

girl who entered his service suffering from deafness, prostration, and stupor, without any intestinal or thoracic difficulty, and who presented this phenomenon in a marked degree. At the moment this explanation was made the patient gave evidence of suffering very different from that experienced in muscular rheumatism.

In view of these facts, M. Lasegue concludes that this symptom, conjoined with others, is a valuable aid in confirming a diagnosis of cerebral or meningeal troubles.

In support of this view, we may mention that Dr. Fournier cites a case of a young man, suffering from cerebral meningitis which was rapidly fatal, in which this pain excited by pressure over the thigh was present in a high degree of intensity. In this patient, treated by MM. Fournier, Charcot, and Edward Labbe, the pain was so severe that these gentlemen at several different times made a careful search to ascertain whether there was not present some local trouble in the form of periostitis, ostitis, or abscess, independent of the cerebral affection.

A careful examination failed to give any explanation or clue to local difficulty.

With a view of calling attention to the apparent connection between the meningeal trouble and the pains referred to, M. Fournier proposed to designate them as "cerebral pains of the extremities" until a more satisfactory idea can be formed of the real pathogeny.—*Dr. R. M. Denig (Translation), Columbus Medical Journal.*

THERMIC DYSPNEA.—The mode of action of heat in increasing the frequency of respiration has received different explanations at the hands of various authors. Ackermann, Goldstein, and others have explained the respiratory acceleration as due to warming of the central nervous system. M. Sihler has supported the doctrine of a reflex action, the afferent surface being the peripheral cutaneous nerves. M. Ch. Richet has recently communicated the principal conclusions at which he has arrived to the Academie des Sciences. When a dog has been tetanized by repeated strong electrical shocks, the temperature of the animal is elevated and the rate of respiration is increased. As soon as the temperature has passed beyond 40.5° C. (104.9° F.), the respiratory rhythm is accelerated to 200, 300, or even 340 respirations per minute. From this experiment Richet concludes that thermic dyspnea may be of central origin and due to the heating of the blood and nervous system. But Richet also believes in a reflex thermic dyspnea, as he appears to prove by placing dogs in a warm stove, the temperature of the internal viscera remaining normal when the atmosphere of the stove is 38°, the respiratory rhythm being raised to 300 or more per minute. This reflex thermic dyspnea is not observed in man, in whom the skin is more fitted for transpiration. Richet has found that a muzzled dog soon became feverish when placed in a warm stove; for example, the stove at 39°, the temperature of the dog became 42° in an hour. Even tracheotomy and the use of a cannula in a muzzled dog did not prevent the onset of a marked pyrexia, and the animal died asphyxiated; hence normal respiratory movements are insufficient to support life when a dog is placed in a hot medium. Chloral in an anesthetic dose, abolishing all the reflexes does away also with reflex thermic dyspnea; the chloralized dog placed in the hot chamber, being unable to breathe faster, becomes overheated and dies. Morphia, even in large doses, does not prevent the respiratory acceleration. In order that the inspirations may be increased in frequency, it is necessary that the trachea be largely opened, so that there is no resistance to free inspiration and expiration, whereby the tension of carbonic acid in the lungs may be reduced. If the surcharge of carbon dioxide be too great, respiration becomes deep and slow. Then there is an asphyxial dyspnea characterized by slow and deep inspirations, while the thermic dyspnea is marked by rapid and superficial inspirations. Though chloral gets rid of the reflex thermic respiratory acceleration, it is powerless over the thermic dyspnea of central origin. No reflex excitation seems to be able to prevent the occurrence of the central form of dyspnea, while the reflex form appears to be under the control of the will, and of all peripheral stimulations; for example, cold water affusion. The central form is said to persist, even after the temperature has returned to the normal, the respiratory center in the medulla not having lost its newly acquired rhythm, though cold water applications are then able to restore the natural rhythm.—*Lancet.*

THE SIGNIFICANCE OF ALBUMEN IN THE URINE.—Dr. Orville W. Owen writes, in the Medical Age: In making a large number of analyses of urine, there are found many

samples which show by chemical tests a greater or less amount of albumen or its earlier form, albuminose. When albumen, is found, as a rule, the diagnosis is renal or vesical trouble. This is, in many cases, a grand error, and it should be borne in mind that we may have a large quanity of albumen, and even a cast or two, without having organic disease of the kidneys or bladder. The diagnosis of renal diseases is not quite as simple an affair as one would suppose from reading text-books, or watching the common method of making an examination. Albumen may be found under four distinct heads: (1) All organic diseases of the kidneys where inflammation is one of the factors, as in nephritis, acute or chronic. Granular degeneration, lardaceous kidney or malignancy, under which head we may also class tuberculosis. (2) Any inflammation of the ureters, bladder, prostate or urethra, and, in the female, of the vagina, as gonorrhea, prostatitis, cystitis, etc. (3) Under mechanical traumatic or systemic pressure, due either to fecal matter, injury to renal veins, diseases of the circulation, medicinal substances, infectious or contagious diseases, diphtheria, typhoid fever, cholera, etc. (4) From the ingestion of large quanities of albumen or albuminous foods. The albumen of any one of these causes can not be distinguished one from the other by any known chemical test, and we must make, not only a complete and thorough chemical analysis, but must also depend largely upon our microscopical examination to clear up and make light the dark places. Let one make an examination of urine passed by a lady suffering from a profuse leucorrheal discharge, or from a man with prostatitis, and here will be, by chemical test, conclusive evidence of grave renal diseases, when in fact a course of uterine treatment of one, and urethritic treatment of the other, will dissipate the albumen. But, on the other hand, we can not give a postive diagnosis of absence of renal disease when no albumen is found, for grave and fatal kidney disease may exist and yet there be no albumen or its prototype. You will please notice that under the first head I say albumen *may be found*, yet granular degeneration may go on to a fatal termination without the urine showing albumen. So too an intense congestion of the renal circulation may take place and death ensue before any albumen can get into the urine. The mere presence of albumen is not conclusive evidence of renal difficulty, for *albumen is but a symptom and not a disease.* When pus is found in large quantities, and associated with it albumen (the natural sequence of the pus formation and degeneration), the diagnosis *must* be based upon the balance of the chemical tests, and the microscopical examination; and I would like, right here, to emphasize the fact, that albumen by itself has no diagnostic significance, that is, if found alone and without any other of the morbid products. I may be assailed upon this point, as I was when I made the statement in my article in the Detroit Clinic, that renal calculi could be diagnosed by microscopical examination; and, in another article, that the urine loaded with glucose would show a low specific gravity, 1.010 1.020, rather than a high, 1.030-40. But time, which clears up most thir gs, will, I am sure, uphold me in this statement, as, I am thankful to say, it has in the others. The time will come, and in the near future, when text-books with "Albuminuria" as a title will be done away with, and each organic disease of the kidneys will have a distinct name, and the albuminuria will be placed in its own proper place as a symptom and not held up to the world as a disease. When these facts are recognized, then will the treatment of nephritis, etc., be placed upon a substantial and scientific basis.

THE TREATMENT OF HEMOPTYSIS.—Although pulmonary hemorrhage is of less moment as regards the danger of immediate death than many other of the grave symptoms of phthisis, it is a complication that is most alarming to patient and friends. In the matter of treatment, the effects of the fright and subsequent mental disturbance which the patient experiences, are important factors which should not be neglected. This manifested anxiety is most sure to influence the physician to overlook the agitated state of the patient's mind, and without further consideration, he immediately institutes some energetic course of treatment, based upon the most arbitrary principle or founded by the grossest empiricism. Remedies thus administered generally result in doing no good, and not infrequently a great degree of harm. Administer a dose of ergotin or of fluid extract of ergot hypodermically. Assure the patient and his excited friends that it is an occurrence of greatest rarity for death to result from one of these attacks. Large doses of astringents have little or no effect on the pulmonary lesion, and through their

effect on the bowels they increase the arterial pressure and promote the bleeding. This will exclude in the treatment such medicines as gallic or any of the mineral acids; alum, although it is strongly recommended by many; acetate of lead, which is warmly advocated; chloride of sodium, a remedy employed by many from the fact, perhaps, that it is convenient. These, with ipecacuanha, tartar emetic, and other drugs that have strong advocates as to their efficiency, have, in the great majority of cases, gained their repute from the hemorrhage stopping spontaneously. Although a multitude of drugs are recommended, and not a few almost regarded as specifics, it must be admitted that the profession has at command but a few preparations that have unquestioned influence to control pulmonary bleeding. Ergotine and the fluid extract of ergot have been mentioned; oil of turpentine, given by mouth or rectum, exhibits positive action in hemoptysis of phthisis. But it can not be too forcibly urged that the most important condition requiring treatment is the terror manifested by the patient, so alarming and distressing to the friends, which in turn tends to further alarm the patient. The administration of opium in some of its forms is clearly indicated to calm the excited brain and reduce the throbbing heart. Give it hypodermically, that its physical effects may be quickly produced. The result is magical. The patient's actions and countenance are speedily calmed, the bleeding stops, the much needed refreshing sleep is obtained, and the over-estimated danger averted.—*Physician and Surgeon.*

NEPHRECTOMY FOR TUBERCULOUS KIDNEY.—On Saturday, June 21st, Dr. Bantock removed an enlarged tuberculous right kidney from a woman aged thirty-three. A large tumor filled the right side of the abdomen, and the patient's urine had been free from pus. An incision was made in the middle line. The extraction of the kidney proved to be a matter of considerable difficulty, as the capsule was very thick and adherent to surrounding structures and the glandular substance very soft. The renal artery and vein were plugged, but the vessels passing from the capsule to the gland were much enlarged, and bled freely on division. The ureter was thickened and dilated to an extreme degree; it was divided, and the free surface of the stump was closed by sutures applied to its edges. The dilated calices were filled with a red grumous material, the pelvis contained pus. A drainage-tube was passed into the right loin after removal of the kidney. The patient was progressing favorably on Thursday morning, June 26th.—*Birmingham Medical Review.*

DR. ROBERTS BARTHOLOW, declares chloral to be the incomparable remedy for Asiatic cholera. He gives it coincidently with morphine and atropine. His experience has been confined to the Mississippi valley, which, he says, is as much the home of cholera as is the Ganges, the conditions being the same, and sporadic cases occurring there every year. Whether chloral acts as a disinfectant which destroys Koch's microbe, or cures by relieving Dr. E. Halsey Wood's gangliasthenia, is not stated.—*The Med. Age.*

ARMY MEDICAL INTELLIGENCE.

OFFICIAL LIST of Changes in the Stations and Duties of Officers serving in the Medical Department, United States Army, from September 21, 1884, to September 27, 1884.

Middleton, Passmore, Major and Surgeon, having reported from sick leave of absence, assigned to duty at Fort Leavenworth, Kansas. (Par. 2, S. O. 188, Hdqrs. Dept. of Mo., Sept. 19, 1884.) *White, R. H.*, Captain and Assistant Surgeon, assigned to duty as Post Surgeon at Fort Winfield Scott, Cal., relieving Assistant Surgeon A. S. Polhemus, who, upon being relieved, will report to commanding officer, Alcatraz Island, Cal., for duty. (Par. 1, S. O. 113, Hdqrs. Dept. of Cal., Sept. 19, 1884.) *Hall, Jno. D.*, Captain and Assistant Surgeon, assigned to duty at Fort Townsend, Wash. Ter., to relieve Surgeon R. S. Vickery. Surgeon Vickery, on being relieved, directed to report to commanding officer, Vancouver Bks., Wash. Ter., for duty. (Par. 3, S. O. 140, Hdqrs. Dept. of Cal., Sept. 15, 1884.) *Tesson, L. S.*, Captain and Assistant Surgeon, directed to report to commanding officer, Fort Stockton, Tex., for temporary duty. (Par. 3, S. O. 127, Hdqrs. Dept. of Tex., Sept. 21, 1884.) *Birmingham, H. P.*, First Lieutenant and Assistant Surgeon, leave of absence extended twenty days. (Par. 2, S. O. 116, Hdqrs. Div. of the Mo., Sept. 22. 1884.) *Maddox, T. J. C.*, First Lieutenant and Assistant Surgeon, directed to report to commanding officer, post of San Antonio, Tex., for duty. (Par. 5, S. O. 127, Hdqrs. Dept. of Tex., Sept. 22, 1884.) *Barrows, C. C.*, First Lieutenant and Assistant Surgeon, leave of absence extended one month. (Par. 6, S. O 97, Hdqrs. Div. of the Pacific, Sept. 19, 1884.) *Dietz, W. D.*, First Lieutenant and Assistant Surgeon, assigned to duty at Fort Selden, N. M., Post Surgeon. (Par. 4, S. O. 187, Hdqrs. Dept. of Mo., Sept. 18, 1884.) *McCaw, W. D.*, First Lieutenant and Assistant Surgeon, assigned to duty as Post Surgeon, Fort Craig, N. M. (Par. 5, S. O. 187, Hdqrs. D. of Mo., Sept. 18, 1884.)